Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the current application.

1. (Previously Presented) An ApoA-I agonist compound comprising:

(i) a 22 to 29-residue D-enantiomeric peptide or peptide analogue which forms an amphipathic α-helix in the presence of lipids and which comprises formula (I):

Z_1-X_1-X_2-X_3-X_4-X_5-X_6-X_7-X_8-X_9-X_{10}-X_{11}-X_{12}-X_{13}-X_{14}-X_{15}-X_{16}-X_{17}-X_{18}-X_{19}-X_{20}-X_{21}-X_{22}-X_{23}-Z_2

or a pharmaceutically acceptable salt thereof, wherein:

X_1 is D-Ala (a), Gly (G), D-Gln (q), D-Asn (n), D-Asp (d) or D-Pro (p);

X_2 is a D-enantiomeric aliphatic residue;

X_3 is D-Leu (l) or D-Phe (f);

X_4 is a D-enantiomeric acidic residue;

X_5 is D-Leu (l) or D-Phe (f);

X_6 is D-Leu (l) or D-Phe (f);

X_7 is a D-enantiomeric hydrophilic residue;

X_8 is a D-enantiomeric acidic or a basic residue;

X_9 is D-Leu (l) or Gly (G);

X_{10} is D-Leu (l), D-Trp (w) or Gly (G);

X_{11} is a D-enantiomeric hydrophilic residue;

X_{12} is a D-enantiomeric hydrophilic residue;

X_{13} is Gly (G) or a D-enantiomeric aliphatic residue;

X_{14} is D-Leu (l), D-Trp (w), Gly (G) or D-Nal;

X_{15} is a D-enantiomeric hydrophilic residue;

X_{16} is a D-enantiomeric hydrophobic residue;

X_{17} is a D-enantiomeric hydrophobic residue;

X_{18} is D-Gln (q), D-Asn (n) or a D-enantiomeric basic residue;

X_{19} is D-Gln (q), D-Asn (n) or a D-enantiomeric basic residue;

X_{20} is a D-enantiomeric basic residue;

X_{21} is a D-enantiomeric aliphatic residue;

X_{22} is a D-enantiomeric basic residue;

X_{23} is absent or a D-enantiomeric basic residue;

Z_1 is R_2N- or RC(O)NR-;

Z_2 is -C(O)NRR, -C(O)OR or -C(O)OH or a salt thereof;

each R is independently -H, (C_1-C_6) alkyl, (C_1-C_6) alkenyl, (C_1-C_6) alkynyl, (C_5-C_{20}) aryl, (C_6-C_{26}) alkaryl, 5-20 membered heteroaryl, 6-26 membered alkheteroaryl or a 1 to 7-residue peptide or peptide analogue in which one or more bonds between residues 1 through 7 are independently a substituted amide, an isostere of an amide or an amide mimetic; and

each " - " between residues X_1 through X_{23} independently designates an amide linkage, a substituted amide linkage, an isostere of an amide or an amide mimetic; or

(ii) a 22 to 29-residue altered D-enantiomeric peptide or peptide analogue according to formula (I) in which at least one of residues X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, X_{15}, X_{16}, X_{17}, X_{18}, X_{19}, X_{20}, X_{21}, X_{22} or X_{23} is conservatively substituted with another D-enantiomeric residue.

2. (Canceled).

3. (Previously Presented) The ApoA-I agonist compound of Claim 1 which is the altered D-enantiomeric peptide or peptide analogue according to formula (I).

4. (Previously Presented) The ApoA-I agonist compound of Claim 3 in which the D-enantiomeric hydrophobic residues are fixed according to formula (I) and at least one non-fixed residue is conservatively substituted with another D-enantiomeric residue.

5. (Previously Presented) The ApoA-I agonist compound of Claim 4 in which:

X_1 is D-Pro (p), Gly (G) or D-Ala (a);

X_2 is D-Ala (a), D-Leu (l) or D-Val (v);

X_3 is D-Leu (l) or D-Phe (f);

X_5 is D-Leu (l) or D-Phe (f);

X_6 is D-Leu (l) or D-Phe (f);

X_9 is D-Leu (l) or Gly (G);

X_{10} is D-Leu (l), D-Trp (w) or Gly (G);

X_{13} is D-Leu (l), Gly (G) or D-Aib;

X_{14} is D-Leu (l), D-Nal, D-Trp (w) or Gly (G);

X_{16} is D-Ala (a), D-Nal, D-Trp (w), Gly (G), D-Leu (l) or D-Phe (f);

X_{17} is D-Leu (l), Gly (G) or D-Nal;

X_{21} is D-Leu (l); and

at least one of X_4, X_7, X_8, X_{11}, X_{12}, X_{15}, X_{18}, X_{19}, X_{20}, X_{22} and X_{23} is conservatively substituted with another D-enantiomeric residue.

6. (Previously Presented) The ApoA-I agonist compound of Claim 5 in which the D-enantiomeric hydrophilic residues are fixed according to formula (I) and at least one non-fixed residue is conservatively substituted with another D-enantiomeric residue.

7. (Previously Presented) The ApoA-I agonist compound of Claim 6 in which:

X_4 is D-Asp (d) or D- Glu (e);

X_7 is D-Lys (k), D-Arg (r) or D-Orn;

X_8 is D-Asp (d) or D-Glu (e);

X_{11} is D-Asn (n) or D-Gln (q);

X_{12} is D-Glu (e) or D-Asp (d);

X_{15} is D-Asp (d) or D-Glu (e);

X_{18} is D-Gln (q), D-Asn (n), D-Lys (k) or D-Orn;

X_{19} is D-Gln (q), D-Asn (n), D-Lys (k) or D-Orn;

X_{20} is D-Lys (k) or D-Orn;

X_{22} is D-Lys (k) or D-Orn;

X_{23} is absent or D-Lys (k); and

at least one of X_1, X_2, X_3, X_5, X_6, X_9, X_{10}, X_{13}, X_{14}, X_{16}, X_{17} and X_{21} is conservatively substituted with another D-enantiomeric residue.

8. (Previously Presented) The ApoA-I agonist compound of Claim 7 in which X_3 is D-Leu (l) or D-Phe (f), X_6 is D-Phe (f), X_9 is D-Leu (l) or Gly (G), X_{10} is D-Leu (l) or D-Trp (w) or Gly (G) and at least one of X_1, X_2, X_5, X_{13}, X_{14}, X_{16}, X_{17} and X_{21} is conservatively substituted with another D-enantiomeric residue.

9 - 11. (canceled)

12. (Previously Presented) The Apo-A-I agonist compound of Claim 1 which is 22-23 residue D-enantiomeric peptide or peptide analogue according to formula (1).

13. (Previously Presented) The ApoA-I agonist compound of Claim 12 in which:

the "-" between residues designates -C(O)NH-;

Z_1 is H_2N-; and

Z_2 is -C(O)OH or a salt thereof.

14. (Previously Presented) The ApoA-I agonist compound of Claim 13, in which:

X_1 is D-Ala (a), Gly (G), D-Asn (n), D-Gln (q), D-Asp (d) or D-Pro (p);

X_2 is D-Ala (a), D-Val (v) or D-Leu (l);

X_3 is D-Leu (l) or D-Phe (f);

X_4 is D-Asp (d) or D-Glu (e);

X_5 is D-Leu (l) or D-Phe (f);

X_6 is D-Leu (l) or D-Phe (f);

X_7 is D-Lys (k), D-Arg (r) or D-Orn;

X_8 is D-Asp (d) or D-Glu (e);

X_9 is D-Leu (l) or Gly (G);

X_{10} is D-Leu (l), D-Trp (w) or Gly (G);

X_{11} is D-Asn (n) or D-Gln (q);

X_{12} is D-Glu (e) or E-Asp (d);

X_{13} is Gly (G), D-Leu (l) or D-Aib;

X_{14} is D-Leu (l), D-Nal, D-Trp (w) or Gly (G);

X_{15} is D-Asp (d) or D-Glu (e);

X_{16} is D-Ala (a), D-Nal, D-Trp (w), D-Leu (l), D-Phe (f) or Gly (G);

X_{17} is Gly (G), D-Leu (l) or D-Nal;

X_{18} is D-Gln (q), D-Asn (n), D-Lys (k) or D-Orn;

X_{19} is D-Gln (q), D-Asn (n), D-Lys (k) or D-Orn;

X_{20} is D-Lys (k) or D-Orn;
X_{21} is D-Leu (l);
X_{22} is D-Lys (k) or D-Orn; and
X_{23} is absent or D-Lys (k).

15. (Previously Presented) The ApoA-I agonist compound of Claim 14, in which X_{23} is absent.

16. (Previously Presented) The ApoA-I agonist compound of Claim 13 or 14, in which one of X_{18} or X_{19} is D-Gln (q) or D-Asn (n) and the other of X_{18} or X_{19} is D-Lys (k) or D-Orn.

17. (Previously Presented) The ApoA-I agonist compound of Claim 14 in which each of X_9, X_{10}, X_{13}, X_{14}, X_{15} and X_{17} is other than Gly (G).

18.-28. (Canceled).

29. (Previously Presented) An ApoA-I agonist-lipid complex comprising an ApoA-I agonist compound and a lipid, wherein the ApoA-I agonist compound is a peptide or peptide analogue according to Claim 1.

30.-33. (Canceled).

34. (Previously Presented) The ApoA-I agonist-lipid complex of Claim 29 in which the lipid is sphingomyelin.

35. (Currently Amended) The ApoA-I agonist-lipid complex of Claim 34 ~~which is~~ in which the ApoA-I agonist-lipid complex is in the form of a lyophilized powder

36. (Canceled).

37. (Previously Presented) A pharmaceutical composition comprising an ApoA-I agonist compound and a pharmaceutically acceptable carrier, excipient or diluent, wherein the ApoA-I agonist compound is a peptide or peptide analogue according to Claim 1.

38.- 41. (Canceled).

42. (currently amended) ~~The~~ A pharmaceutical composition comprising a pharmaceutically acceptable carrier, excipient or diluent and an ApoA-1 agonist-lipid complex wherein the ApoA-I agonist is a peptide or peptide analog of Claim 1. ~~of Claim 37, in which the ApoA-I agonist is in the form of an ApoA-I agonist-lipid complex, said complex comprising the ApoA-I agonist compound and a lipid.~~

43-56. (Canceled).

57. (Previously Presented) An ApoA-I agonist compound which is a D-enantiomeric peptide of SEQ ID NO.:4.